United States Department of Agriculture
Natural Resources Conservation Service

Plant Materials Program
Invasive Plant Species Activities

About the Program

The Natural Resources Conservation Service (NRCS) Plant Materials Program is a nationwide network of 26 Plant Materials Centers and 17 Plant Materials Specialists. Together, these centers and specialists seek out plants and state-of-the-art technology to restore critical habitats, sustain healthy natural resources, and mitigate environmental concerns, including invasive species.

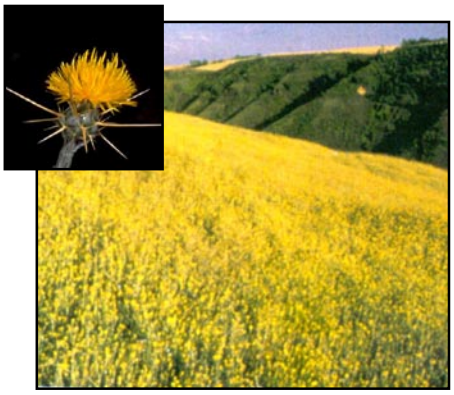
Invasive Plant Species Work

The Plant Materials Program is involved in many activities dealing with invasive and noxious plant species across the U.S., including 54 direct and 146 indirect studies at Plant Materials Centers nationwide. Direct studies are related to controlling or suppressing invasive plant species. Indirect studies involve finding suitable replacements for invasive species or improving native species cover to help prevent infestation of invasive species.

Highlights of Invasive Species Studies at Plant Materials Centers

Pullman Plant Materials Center, Pullman, WA

Yellow starthistle is one of the most noxious and tenacious weeds on over 9.25 million acres of rangeland in the western U.S. Plant Materials Program researchers are examining the effects of native stands of bluebunch wheatgrass on invading yellow starthistle, along with determining the best management practices to enhance bluebunch wheatgrass stands to suppress yellow starthistle.



A field invaded by yellow starthistle.

Plant Materials Centers in Meeker, CO, Aberdeen, ID, and Los Lunas, NM

Cheatgrass, an annual grass found in all 50 states, decreases winter wheat yields and alters the ecology of western rangelands. Plant Materials Centers are evaluating native plant species adapted to compete with cheatgrass-infested areas on range and critical area plantings. They are also evaluating the tolerance of desirable native plant species to herbicides used to control cheatgrass.

Plant Materials Centers in Aberdeen, ID, Corvallis, OR, Big Flats, NY, Beltsville, MD, Pullman, WA, and Los Lunas, NM

Several Plant Materials Centers throughout the nation are evaluating the ability of native species to compete with invasives in riparian and wetland systems. They are also developing methods for the production and establishment of native species. In New York, Oregon, New Mexico, and Idaho, the program is evaluating several native species for their ability to compete with some of the worst invaders, including purple loosestrife, Japanese knotweed, invasive thistle species, and reed canarygrass. In Washington, control methods and alternative native plants are being tested for Russian olive on the Yakima River. In Maryland, propagation, production, and establishment methods are being developed for native aquatic species to help prevent hydrilla invasion and improve aquatic habitat in the Chesapeake Bay.

Purple loosestrife invades wetlands throughout the U.S.

Plant Materials Centers in Bridger, MT, Brooksville, FL, and Los Lunas, NM

Highly disturbed critical areas, such as those which often occur on minelands, saline sites, and highly acidic sites, are very susceptible to invasion by noxious weeds. Several Plant Materials Centers are evaluating native plants which are specially adapted to these difficult sites to help prevent infestation by noxious weeds such as knapweed, Canada thistle, and cogongrass.

Cogongrass is a major problem in the southeast U.S.

Plant Materials Centers across the country

Eleven Plant Materials Centers are working closely with over 25 units of the National Park Service to develop native plant propagation, production, and establishment techniques to protect disturbed areas from noxious weed invasion on public lands.

Nearly all 26 Plant Materials Centers are developing native plants for a variety of conservation uses to replace introduced and invasive plant species. For example, the Booneville (AR) Plant Materials Center is evaluating methods to establish native grasses in existing stands of tall fescue to improve pasture quality. The Elsberry (MO) Plant Materials Center is developing native shrub alternatives to Amur honeysuckle and autumn olive for wildlife, buffer, and shelterbelt plantings. The Kika de la Garza (TX) Plant Materials Center is evaluating native grasses to replace buffelgrass on rangeland and wildlife areas. The Hoolehua (HI) Plant Materials Center is evaluating windbreak and dryland forest tree and shrub species to replace or help prevent invasion of black wattle and fire tree.

A healthy diversity of native plants will discourage the reinvasion of weeds.

More information on noxious and invasive plants can be found on the NRCS PLANTS Web site at **http://plants.usda.gov** and click on the link for "**Invasive & Noxious**."

For more information, visit **http://Plant-Materials.nrcs.usda.gov** and **http://www.nrcs.usda.gov**

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